

SYSTEMATIC NOTES ON THE TRACHODINAE (COLEOPTERA:
CURCULIONIDAE).

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The following changes and additions affecting the North American members of this group are published in order that names may be available for certain specimens recently submitted for identification.

Sthereus Mots. replaces *Trachodes* Germar for *quadrituberculatus* Mots., *multituberculatus*, new species, and *ptinoides* Germar.

Lobosoma, new genus for (*Aparopion*) *horridum* Mann.

Gastrotaphrus barberi, new genus and species.

The type of *Trachodes* Germar 1824 (Insect. Sp. Novae, p. 325) was designated as *hispidus* Linn., a European species, by Schoenherr 1826 (Curc. Dispositio Methodica, p. 260); as thus limited, *Trachodes* does not occur in North America.

Motschulsky 1845 (Bull. Mosc. IV, p. 373) erected *Sthereus*, new genus, for *fasciculatus* and *borealis*, new species from Kamtschatka (p. 374), and *quadrituberculatus*, new species from Sitka (p. 375). Motschulsky's generic heading reads "Sthereus m. nov. gen. Tab. VII, figs. 4-4"; the figures depict *quadrituberculatus*, and this species is hereby designated genotype of *Sthereus*.

KEY TO AMERICAN SPECIES OF STHEREUS

(*Trachodes* of American lists, not Germar.)

1. Length 4-5 mm; anterior margin of prothorax broadly and distinctly emarginate on sternum, then subvertical upwardly (sometimes faintly lobed opposite eye); pronotum with setigerous granules, a median longitudinal carina, and a transverse groove at base. Alaska to British Columbia. (Type locality, Unalaska).....
ptinoides Germar
- Length, 2-2.3 mm.; anterior margin of prothorax in side view subevenly oblique from middle of sternum to top; pronotum punctate, not carinate or grooved.....2
2. Pronotum without 4 clusters of erect setae; anterior or posterior (usually the latter) tubercle on third elytral interval largest of elytral prominences, the fifth and seventh intervals without distinct tubercles; apical margin of fifth sternite of ♂ not bisinuate. Northern California to Prince William Sound, Alaska. (Type locality, Sitka).....*quadrituberculatus* Mots.
- Pronotum with 4 clusters of erect setae; alternate elytral intervals tuberculate, the posterior tubercle on fifth interval usually the largest of elytral prominences; apical margin of fifth sternite of ♂ lightly bisinuate. Oregon and Alaska ...*multituberculatus*, new species.

Sthereus multituberculatus, new species.

Length, 2.9–3.3 mm.; width, 1.3–1.7 mm. A little larger and stouter than *quadrituberculatus*; clothed with pale yellowish to brown setae and small scales which do not conceal the derm, scales on some of the tubercles fuscous to black; derm reddish, piceous black in a broad, vague elytral bar beginning on posterior tubercle of third interval and extending obliquely forward toward sides, usually much broader near side margins; anterior tubercle on third interval, and a short stripe behind it, also blackish; pronotum with 4 clusters of setae in a transverse ante-median row, and usually with narrow median and broader lateral vittae of pale scales.

Rostrum moderately arcuate, about 4 times as long as wide, upper surface not quite continuous with front in profile, 5-carinate in basal half, finely punctate and rugose or strigose in the glabrous apical half, basal half not densely clothed with subprostrate, yellowish setae which are broader on sides and around and above eyes; antennal socket at about apical third, upper edge of scrobe straight and directed toward lower third of eye, scape nearly reaching eye, swollen and bent apically, first funicular segment considerably stouter and longer than second, second longer than third, third to seventh shorter and transverse, the seventh strongly transverse, club ovate; eyes separated above by a little less than width of beak; head densely punctate, closely clothed with minute, slender, prostrate scales. Prothorax nearly as long as broad, sides feebly rounded and divergent from base to widest point about middle, then converging to the broad subapical constriction which extends across the dorsum; pronotum finely and densely punctate, basal margin slightly elevated; setae (or slender scales) subprostrate in general but suberect apically (especially at sides) and in the clusters. Scutellum invisible. Elytra at humeri much broader than prothorax, clothed with small, mostly prostrate setae and slender scales which are usually paler on declivity, the erect vestiture on disk most evident on the tubercles, on declivity forming a crowded row on sutural, and a sparse row on third, fifth, and ninth intervals, the setae black or fuscous on posterior (and sometimes anterior also) tubercle of third interval; serial punctures closely placed, each with a minute, yellowish seta; third interval with 3 tubercles, the posterior one (at top of declivity) largest and subconical, a feebler, elongate one near base and a still smaller one between, the latter sometimes obsolescent; fifth interval with 3 or 4 tubercles, the posterior one largest and placed a little below top of declivity, the submedian tubercle usually elongate and often partially divided into 2, the subbasal one elongate, the discal tubercles tending to merge into a broad costa; seventh interval with 3 tubercles, the basal one forming a short humeral costa which tends to merge with the subbasal tubercle, the third tubercle small and located opposite the posterior tubercle of the third interval; seventh and eighth striae coalescent at about basal fifth. Abdomen and middle of metasternum with sparse, fine setae (much finer than on dorsum), remainder of under surface with minute, slender, dirty white scales which form a stripe on metepisternum; sternites 1 and 2 shiny, finely, strongly, and closely punctate, fifth more finely, very shallowly punctate and somewhat alutaceous, third and fourth shiny, very sparsely punctulate; base of abdomen of ♂ shallowly concave; apical margin of fifth sternite of ♂ slightly emarginate each side, forming at middle a very short, broadly rounded lobe, the surface for a

short distance behind the lobe flat or faintly concave and set with erect pubescence; beyond the fifth sternite of ♂ projects the shiny, punctulate, broadly deflexed apical margin of the anal tergite; intercoxal piece subtruncate and as wide as a hind coxa; suture between first and second sternites nearly fused medially, the second sternite at this point apparently a little shorter than third plus fourth. Legs not densely scaly, the scales practically absent from a narrow band at apex of tibiae; tarsi short, third segment bilobed.

Type locality.—Astoria, Oregon, 24.5 (May 24) Hubbard and Schwarz collection. 1 male.

Other localities.—Virgin's Bay, Alaska, June 26, '99, Harriman expedition '99, T. Kincaid, 1 ♂; Metlakatla, British Columbia, Keen, 1 ♂, 1 ♀, Casey collection.

Type, ♂.—Cat. No. 50660, U. S. N. M.

In the ♀ the fifth sternite is slightly longer, not perceptibly emarginate laterally, and without patch of erect pubescence apically; and the anal tergite does not project beyond the apex of the abdomen.

The species described by Mannerheim as *Trachodes horridus* (Bull. Moscow, 1852, No. 2, p. 354), and later transferred to *Aparopion* by Heyden (Deutsch. Ent. Zeit., vol. 23, 1879, p. 167) can not be retained in either genus and is here made the genotype of

LOBOSOMA, new genus.

(*Aparopion* of American lists, not Hampe.)

Lobosoma horridum, Mann, new combination.

(*Aparopion horridum* of American lists.)

This roughly sculptured, scaly-setose species ranges in length from 4–5.5 mm. The femora are minutely dentate, but the tooth is concealed by the dense scales. The pronotum has a more or less distinct median carina, each side of which is usually a low, arcuate costa. The eye is broad and feebly convex. Specimens have been examined from Puyallup, Electron, Buckley, Graham, Montesano, and White Swan, Washington (W. W. Baker and J. Wilcox); Astoria, Oregon; Victoria and Nainamo, Vancouver Island, British Columbia. The type locality is Sitka.

Mr. Baker states, in litt., that he has seen a specimen labeled Moscow Mt., Idaho; also, that most of his specimens were taken "by sifting debris from the forest floor or close to the edges of timber."

GASTROTAPHRUS, new genus.

Body rather densely clothed with short, prostrate to erect, blunt setae. Rostrum subcylindrical, about 4 times as long as wide, rather feebly arcuate, somewhat shorter than prothorax; mandibles tridentate, the basal tooth rounded

and sometimes indistinct; scrobe sublinear, apex very narrowly visible from above, upper edge directed toward lower part of eye, as in *Lobosoma*; antennal socket at apical third in ♀, slightly nearer apex in ♂; scape failing to reach eye by about length of second funicular segment, slender and glabrous in basal two-thirds, clubbed and sparsely setose apically; funicle 7 segmented, club stout, distinctly less than twice as long as wide in both sexes, basal segment comprising one-half to three-fifths the total mass, the first suture usually indistinct for part of its circumference; eyes rather narrow, short diameter five-eighths or less that of long diameter, feebly convex, separated above by basal width of beak. Prothorax slightly longer than broad, with a broad apical constriction that extends across dorsum, anterior margin in side view slightly produced forward at top, very feebly lobed opposite eye, abruptly and deeply emarginate on sternum; prosternum broadly and faintly sulcate, coxae contiguous and a little closer to hind margin; pronotum tuberculate, hind margin subtruncate. Scutellum invisible. Elytra at base slightly wider than base of prothorax, basal margin emarginate, usually produced forward a little at humeri to embrace hind angles of prothorax, the sides at humeri oblique, then feebly converging to apical third, apex conjointly rounded; serial punctures foveate, alternate (odd) intervals coarsely tuberculate, tenth stria obliterated except near base and apex, ninth stria subcontiguous to margin at middle. Beneath densely clothed with short, coarse, prostrate to suberect setae which are sparser and finer toward apex of abdomen, and absent from the coxae except for a patch on inner face of fore and middle pair. Mid coxae narrowly separated, side pieces of mesosternum indistinct. Metasternum short, with two median excavations, side pieces indistinct, hind coxae subglobular and equal to or slightly broader than the subogival intercoxal piece. Second, third, and fourth abdominal sutures wide and deep, the first finer, first and second sternites with large excavations; third and fourth sternites subequal, together a little longer than second and a trifle shorter than fifth, the latter shorter than the first. Legs moderately stout; femora not toothed, the hind pair not quite reaching the middle of the fifth sternite; tibiae uncinatae, faintly sinuate on ventral edge; tarsi stout, the third segment dilated but with the sinus scarcely reaching middle of segment, pubescence beneath sparser than in *Lobosoma*. Fifth sternite of ♂ slightly longer and more broadly rounded at apex than in ♀.

The ventral excavations and the arrangement of the coxal vestiture distinguish this genus.

Monobasic genotype.—*Gastrotaphrus barberi*, new species.

Gastrotaphrus barberi, new species.

Length, 3.6–4.4 mm.; width, 1.5–1.8 mm. Derm blackish in general, more or less rufopiceous on beak, antennae, legs, and abdomen; vestiture fuscous to tawny, darker and sparser on elytra than elsewhere, often more or less matted together with a dirty crust, but in places (when clean) with a dull golden tinge.

Upper surface of rostrum broadly and shallowly discontinuous with front in profile, densely punctate and 5 carinate in about basal half (♀) or somewhat more (♂), the carinae low and often somewhat sinuous, the lateral carinae feebler and obscured by the vestiture, the surface toward apex with fine, elongate

punctures that are sparser or wanting medially; basal half moderately to densely clothed with setae which are prostrate or nearly so except in a patch of suberect ones above eye; head densely clothed with minute, prostrate setae; interocular puncture absent or feeble; first funicular segment stouter and a little longer than second, the latter about one-third longer than wide, third to seventh progressively wider and ranging from slightly (third) to strongly (seventh) transverse. Prothorax widest about middle, sides from here to base feebly converging and nearly straight or with a broad, faint, ante-basal sinuation, vestiture on flanks very dense; pronotum with an abbreviated median carina that does not reach apex and rarely reaches base, surface irregular, with coarse punctures that tend to coalesce and form pits or coarse sinuous grooves and with 4 elevations arranged in an antemedian, transverse row, the 2 on disk somewhat more prominent, the surface behind these elevations often with feeble swellings; pronotal vestiture composed of minute, subprostrate setae and longer, erect ones, the latter more abundant on the 4 tubercles and in a band along apical margin, the band usually interrupted at middle. Elytra declivous toward base, basal margin more or less prominent, especially at base of third interval, serial punctures fovea-like in general, crowded, very irregular in size, each with a minute seta, the intervals (except where swollen) largely reduced to low, narrow, irregularly sinuous or zig-zag costae; third interval with 1 tubercle at basal quarter (the interval from here to base sometimes costate), 1 about middle, and 1 about apical third (most prominent one on elytra), the last 2 closer together and sometimes joined by a low costa; fifth interval with 4 subequidistant tubercles, 1 at basal fifth, 1 at about apical fourth, the other 2 between; seventh interval with 4 smaller tubercles each slightly anterior to the corresponding tubercle on the fifth interval, the subbasal one farther down on flanks than in *Lobosoma* and with only 2 rows of punctures between it and elytral margin (4 rows in *Lobosoma*), the seventh and eighth striae ending just posterior to this tubercle, ninth interval broadly costate toward apex; elytral vestiture composed of sparse, minute setae on the depressed areas, and longer, coarser, erect setae found chiefly on the tubercles, but present also in a row on sutural and scattered ones on alternate intervals, more crowded near apex, the setae on the large posterior tubercle of third interval yellowish brown, the setae on the other tubercles usually darker brown to fuscous. Beneath and legs densely clothed with minute, prostrate, and longer, inclined setae, the anterior face of tibiae near apex abruptly subglabrous; first sternite with a rounded excavation occupying most of intercoxal piece, laterad of which is a broad sulcus near and paralleling the curved coxal line and reaching side margin, the sulcus usually divided into 2 to 4 cells by narrow cross ridges; second sternite with a pair of large, transversely oval excavations separated at middle of abdomen by a narrow cross ridge, the excavations occupying two-thirds the length and together the middle half or more of the width of the sternite, sometimes connected at sides with the widened and deepened lateral portion of the first suture; there is also a rather large rounded excavation at the middle of the metasternum anteriorly, a narrower one posteriorly, the two narrowly separated, and a smaller, sometimes indistinct, one at side of metasternum near elytral margin. Part or all of the excavations are often closed over by a dirt-colored crust. Abdominal surface microscopically shagreened, moderately shiny, the punctures

sparse, shallow and indistinct, the punctures at apex of fifth sternite stronger; fifth sternite usually with a broad, shallow, submedian impression.

Type locality.—Eureka, California, 2-6, 3-6, and 4-6, H. S. Barber, collector. Six specimens (♂ and ♀) which Mr. Barber informs me were collected June 2, 3, and 4, 1906, probably by sifting in redwood forests.

Type.—♂, Cat. No. 50658, U. S. N. M.

In addition to the above, there is at hand 1 specimen each from Montesano and Westport, Washington (W. W. Baker) and Metlakatla, British Columbia (Keen), (Casey collection). These do not agree in all respects with one another or with the California specimens, and are not included in the type series.

In the ♂ specimens seen, the abdomen is unnaturally distended, but the appearance suggesting that, even on contracted specimens, the apex of the anal tergite will be visible beyond the tip of the fifth sternite.

DESCRIPTIONS OF TWO NEW ENCYRTID PARASITES OF NON-DIASPINE SCALES.

By HERBERT L. DOZIER.

This paper contains the descriptions of two new and interesting encyrtid parasites, both reared from non-diaspine Coccidae or soft scales. The species, *Coccidoctonus ceroplastae*, n. sp., is a primary parasite of the Florida Wax Scale, *Ceroplastes floridensis* Comstock, and appears to be the principal controlling factor of that insect in Haiti.

The type slides of the new species described are deposited in the U. S. National Museum.

Aenasioidea trimblei, new species.

Differentiated at once from the other described members of the genus by having the antennae entirely fuscous except the white distal tip of the pedicel.

Female.—Length 1.50 mm.; expanse 2.94 mm.; greatest width of forewing 0.52 mm. General color brownish, the thorax variegated with yellowish-white on the disk. Antennae fuscous, except the white distal tip of the pedicel. Legs pale, prominently marked with fuscous; femora slightly shaded on posterior portion; front legs with the entire tarsus light brown, the tibia with the proximal and distal ends infuscated and two annulated bands across the middle; the hind legs with only the terminal joint of the tarsus dark, the tibia twice-banded across the middle with fuscous and with the proximal tip infuscated. The head, prescutum, parapsides and scutellum reticulated.